The following names were proposed for membership: Student members: John MacDonald, Carl Goodpasture, Steven Haskett. Regular members: George Tamaki, C. E. Langston, John D. Glaser, Wayne L. Vaundell, Donald V. Jolly, Beverly Ehreth, David E. Foster, Fred Roberts, Jim Batts.

Program Chairman Ron Stecker announced that the next meeting may be held on the 12 November 1971 and that the principal speaker would be Dr. Henry Robinson. Dr. Robinson is expected to speak on his work in medical entomology done for the World Health Organization in Southeast Asia. Dr. Stecker also announced that the following meeting's main speaker will be the outgoing President, Louis Blanc, who will deliver the traditional presidential address.

Dr. Stecker announced that the San Jose Entomology Club had torn 30,000 reprints from excess issues of the *Pan-Pacific Entomologist*. These were to go on sale, and the proceeds to benefit both the Pacific Coast Entomological Society and the San Jose State Entomology Club.

President Blanc expressed his appreciation on behalf of the Society to the San Jose State Entomology Club for their fine job in making these papers available.

President Blanc announced that the Treasurer, Dr. Arnaud, had received correspondence from the Internal Revenue Service concerning the status of the Pacific Coast Entomological Society as a non-profit organization. President Blanc proposed an addition to the Society's Articles of Incorporation to meet the federal requirements for a tax-exempt corporation. The addition to the Articles was thereupon put to the vote of the members and unanimously approved.

President Blanc called for notes and exhibits. The following notes were submitted:

Some Observations on Tarantula Behavior.—On 27 July 1971, a large, brown tarantula (Araneae: Theraphosidae) was given to the Department of Entomology of the California Academy of Sciences. Unfortunately, the origin of the spider is unknown because it was originally purchased from a biological supply company. Also, due to the incomplete knowledge of the systematics of this group, the generic and specific assignment is not known.

On 7 September 1971, the tarantula constructed a whitish egg sac which was approximately 1.75 in. long, 1 in. wide and ½ in. thick. The sac was flaccid, assuming, to some degree, the shape of whatever substrate it was placed on. The egg sacs of many other spiders, such as the Black Widow (*Latrodectus mactans*), *Argiope* spp., and the wolf spiders, are strong enough to maintain a circular shape. It was not tightly packed with eggs, since the contents would shift from one end to the other when handled. The sac was carried about at times, held tightly by the chelicerae, and at other times it was left on the ground, seemingly ignored.

On 1 October 1971, the tarantula destroyed and ate the egg sac and much of its contents. At this time, I salvaged a portion of the sac and was able to determine that it consisted of five separate layers of silk, the outermost layer being thicker than the others. The space inside would have had an approximate diameter of 1½ in. if circular.

The eggs were a shimmery yellowish-green with irregular white spots which moved, as the egg was moved, as if suspended between the "shell" and an inner central mass. Of the several eggs examined, none showed any trace of embryonic development.

This spider had been kept as a pet for two years prior to coming to the California

Academy of Sciences, and during that time never came in contact with a male. Thus, even though copulation had not occurred, an egg sac was constructed to accommodate infertile eggs.—JOHN T. HJELLE, *California Academy of Sciences, San Francisco.*

High Flight of Butterflies in San Francisco, California.—The purpose of this note is to report observations made by Mr. Russell W. LaBelle, a stock broker, who has an office in the Bank of America building in the Business district of San Francisco. The Bank of America building is San Francisco's highest; 52 stories and 779 feet in height. It is located in the block surrounded by California, Kearny, Pine, Montgomery Streets. From his 43rd story window, which is at a elevation of over 600 feet, on 4 and 5 October 1971, Mr. LaBelle noted butterflies flying in sufficient numbers to warrant telephoning the Academy to report this occurrence. During mid-day a butterfly was seen every few minutes. He observed, from his windows facing on California Street, that the butterflies were flying mostly from west to east. This direction of flight would direct them inland rather than towards the coast.

The species involved in this flight is not definitely known. It was not possible to collect voucher specimens, and an entomologist did not view the flight. It was at first thought that the Monarch, *Danaus plexippus* (Linnaeus) was responsible for this flight. However, from information on extensive flights of the California Tortoise Shell, *Nymphalis californica* (Boisduval) reported in the bay area by Dr. J. Powell at this same time, this latter species may have been involved in this flight.—PAUL H. ARNAUD, JR., *California Academy of Sciences, San Francisco.*

Mass movements of *Nymphalis californica*.—*Nymphalis californica* undergoes periodic or sporadic massive population increases and mass movements which have been called migrations in the literature. The last time this occurred in the San Francisco Bay area was in 1960, when several aggregations of the butterflies were observed in spring, followed by tremendous populations developed in June. During intervening years the species is scarce and may not be a breeding resident here. Data which will be published elsewhere were given concerning movements of the butterflies in the Berkeley Hills during 5–14 October 1971. A request was made for recording of any observations of *Nymphalis*, particularly mass movements, during this fall and next year. Circumstances indicate that the note given earlier in this meeting, on high-flying butterflies over San Francisco, involved observations on *N. californica*.—J. A. POWELL, *University of California, Berkeley.*

Further Observations of Theraphosid Tarantula Burrows.—Two groups of colonies of tarantulas are being observed; one is located at Frank Raines County Park in Stanislaus County, 17 miles west of Patterson. The other is at Los Gatos Creek County Park, Fresno County, 21 miles west of Coalinga. These colony sites have been visited once a month since their discovery over a year ago. Usually the observations have been made during the first weekend of each month.

The Frank Raines Park colonies are on grassy slopes in oak woodlands with a mixture of digger pines, juniper and chamise and are on the north facing slopes. At Los Gatos Park, the area is an almost level grassland with oak-juniper woodlands having a sparse distribution of digger pine and chamise. Both areas have been disturbed by man in the making of the parks, but this apparently has had little effect on the existence of the tarantula colonies.

In late summer and early fall, the tarantula burrow is easy to distinguish because its occupant has woven a collar of webbing around the edge of the opening and